

IN THE SPECIFICATION

(1) Insert the following paragraph on page 1, after line 6:

This application incorporates by reference the contents of a 436 kb text file created on August 7, 2009 and named “SN10565126_sequencelisting.txt,” which is the sequence listing for this application.

(2) Delete the paragraph on page 3, lines 19-20 and replace it with:

FIGURE 1 identifies a leader peptide sequence, two coiled-coil sequences, a leucine zipper sequence and a transmembrane sequence within a GAS 40 amino acid sequence (SEQ ID NO:1).

(3) Delete the paragraphs on page 3, lines 24-26 and replace them with:

~~FIGURE 3 includes FIGURES 3A-3D include~~ the BLAST alignment analysis of identified coiled-oil regions of GAS 40 (SEQ ID NO:1) with other Streptococcus bacteria. FIGURE 3A, SpA precursor of S. gordonii (SEQ ID NO:15); FIGURE 3B, SpB precursor of S. gordonii (SEQ ID NO:16); FIGURE 3C, PspA precursor of S. pneumoniae (SEQ ID NO:17); FIGURE 3D, SpB precursor of S. gordonii (SEQ ID NO:16).

FIGURE 4 provides predicted secondary structure for an amino acid sequence of GAS 40 (SEQ ID NO:1).

(4) Delete the paragraph on page 45, lines 12-30, and replace it with:

Two pairs ~~couples~~ of complementary oligodeoxyribonucleotides are synthesised using the DNA synthesiser ABI394 (Perkin Elmer) and reagents from Cruachem (Glasgow, Scotland). Equimolar amounts of the oligo pairs (50 ng each oligo) are annealed in T4 DNA ligase buffer (New England Biolabs) for 10 min in a final volume of 50 µl and then left to cool slowly at room temperature. With the described procedure the following DNA linkers are obtained:

gexNN linker (SEQ ID NOS:137 and 138)

NdeI NheI XmaI EcoRI NcoI SalI XhoI SacI
GATCCCCATATGGCTAGCCGGGGAAATCGTCCATGGAGTGAGTCGACTGACTCGAGTGATCGAGCTC
GGTATACCGATGGGCCCCCTTAAGCAGGTACCTCACTCAGCTGACTGAGCTCACTAGCTCGAG

NotI
CTGAGCGGCCGCGATGAA
GACTCGCCGGCGTACTTCGA

gexNNH linker (SEQ ID NOS:139 and 140)

HindIII NotI XhoI Hexa-Histidine
TCGACAAGCTTGCAGCCGCCTCGAGCATCACCACCATCACTGAT
GTTCGAACGCCGGCGTAGAGGTAGTGGTAGTGAATCGA

(5) Delete Table 1 on page 46 and replace it with:

5' tails	3' tails
NdeI 5' GTGCGTCATATG 3' (<u>SEQ ID NO:141</u>)	XhoI 5' GCGTCTGAG 3' (<u>SEQ ID NO:144</u>)
NheI 5' GTGCGTGCTAGC 3' (<u>SEQ ID NO:142</u>)	NotI 5' ACTCGCTAGCGGCCGC 3' (<u>SEQ ID NO:145</u>)
SpeI 5' GTGCGTACTAGT 3' (<u>SEQ ID NO:143</u>)	HindIII 5' GCGTAAGCTT 3' (<u>SEQ ID NO:146</u>)

(6) Delete the paper copy of the sequence listing filed on January 19, 2006.